

## Amendments to the Claims

1. (Currently amended) A light-emitting diode characterized by comprising:  
an electron implanting injecting electrode, that is, an n-electrode;  
a hole implanting injecting electrode, that is, a p-electrode; and  
an inorganic light-emitting layer which is disposed between the n-electrode and the p-electrode so as to contact these electrodes in a non-barrier junction manner and which is formed of an ambipolar inorganic semiconductor material,

wherein the ambipolar inorganic semiconductor material [[has]] is selected from the group consisting of (a) a group II-VI compound [[, or] and (b) Zn and at least one element selected from the group consisting of S, Se and Te.

2. (Currently amended) The light-emitting diode according to claim 1, characterized in that

the ambipolar inorganic semiconductor material has a dopant concentration of 0.1% or less in atomic ratio.

3. (Currently amended) The light-emitting diode according to claim 1 [[or 2]], characterized in that

a thickness of the inorganic light-emitting layer is in a range of 10 nm or more and 10  $\mu$ m or less.

4. (Currently amended) The light-emitting diode according to any one of claims 1 to 3 and 10, characterized in that

the n-type electrode includes a layer formed by use of an n-type inorganic semiconductor material in which an n-type dopant is diffused into the ambipolar inorganic semiconductor material.

5. (Currently amended) The light-emitting diode according to any one of claims 1 to 3 and 10, characterized in that

the p-type electrode includes a layer formed by use of a p-type inorganic semiconductor material in which a p-type dopant is diffused into the ambipolar inorganic semiconductor material.

6. (Currently amended) The light-emitting diode according to any one of claims 1 to 3 and 10, characterized in that

the n-type electrode includes a layer formed by use of an n-type inorganic semiconductor material in which an n-type dopant is diffused into the ambipolar inorganic semiconductor material, and the p-type electrode includes a layer formed by use of a p-type inorganic semiconductor material in which a p-type dopant is diffused into the ambipolar inorganic semiconductor material.

7. (Currently amended) The light-emitting diode according to any one of claims 1 to 3 and 10, characterized in that

a material of a portion contacting the light-emitting layer in at least one of the n-type electrode and the p-type electrode is formed by use of a material substantially different from the material of the light-emitting layer.

8. (Currently amended) The light-emitting diode according to any one of claims 1 to [[7]] 3 and 10, characterized in that

an ambipolar inorganic semiconductor material is formed on a crystalline substrate or a glass substrate, and the n-electrode and the p-electrode are formed on the ambipolar inorganic semiconductor material so as not to contact each other.

9. (Currently amended) The light-emitting diode according to any one of claims 1 to [[7]] 3 and 10, characterized in that

the n-electrode or the p-electrode is formed on a crystalline substrate or a glass substrate, and an ambipolar inorganic semiconductor material is stacked thereon, and the p-electrode or the n-electrode is stacked thereon.

10. (New) The light-emitting diode according to claim 2, characterized in that a thickness of the inorganic light-emitting layer is in a range of 10 nm or more and 10  $\mu$ m or less.